Managing Work-Related Suicide of Fly-In/Fly-out Employees' in the Australian Mining Industry

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ABSTRACT

Work-related suicide of Fly-In/Fly-Out (FIFO) mining employees is an emerging concern, yet there is limited knowledge about the impact of occupational and individual risks and how mining companies can best protect both their interests and their workers. To advance this line of research, this developmental paper provides a review of the causes of, and relationships between, occupational and psychosocial risk factors, and discusses management approaches to work-related suicide. The primary contributions of the paper are to identify vulnerable occupations, identify risks in the FIFO employment arrangement, and strengthen an understanding of the demographic profiles of FIFO employees and work-related suicide 'victim profiles'. Consequently, this helps to indicate where intervention should be focused, and serves to recommend areas for future research.

2

(Interactive paper, Stream 5: Health Management and Organisation)

Mining employees' traditionally took a caged canary underground to indicate dangerous gas, and this helped establish the concept of early warning which remains relevant in the Australian mining industry today. Low levels of well-being are increasingly being reported among Fly-In/Fly-Out (FIFO) employees' (Henry et al. 2013; Kelly et al. 2012; Peetz et al. 2012), and this is of particular concern due to the association between well-being and suicide (Sisask et al. 2008). Work-related suicide of FIFO mining employees' is emerging as a topical issue and, like the miner's canary, may indicate underlying occupational risks associated with this particular working arrangement.

Occupational impacts on mental health contains wide ranging implications for employee health and organisational outcomes, such as the Australian legal requirement to ensure the well-being of workers, Work Health and Safety (WHS), workers compensation claims for mental stress, and worker productivity (Dollard & Bakker 2010). Despite the significance of these impacts, extant research which explores FIFO employee mental health is limited and provides little critical evaluation. Pini and Mayes (2012) attribute this to studies frequently being sponsored by the mining industry and focused on their particular requirements. The linked deaths of two FIFO employees' in Western Australia (W.A.) in May 2014 has precipitated renewed public debate in news and social media into FIFO mental health and work-related suicide. Investigations by the coroner's office and the Department of Mines' and Petroleum will indicate liabilities and recommendations to industry, which can be expected to have a raft of sequential effects. The two deaths highlight the need for mental health and suicide awareness among employees' and mining companies. It raises the spectre of how mining companies' can best protect both their interests and their FIFO employees from work-related suicide.

This developmental paper will discuss work-related suicide, FIFO occupational risks, characteristics of FIFO employees' and work-related suicide 'victim profiles', and management approaches. It seeks to outline the relevant issues associated with work-related suicide among FIFO employees in the mining industry, provide a case for empirical research into this issue and recommend important antecedent factors for a developmental model. The research questions are: (a) to what extent are

occupational risks for work-related suicide present in the FIFO employment arrangement? and (b) what is the prevalence of individual risks for work-related suicide among FIFO employees?

WORK-RELATED SUICIDE

Sociologist, Emile Durkheim (1897/1951) conducted seminal work on the then (and arguably still) taboo topic of suicide. He identified different suicide types from the contexts in which they occurred, which emphasised the contribution of the social role underpinning suicide. Durkheim advised that Egoistic suicide occurs from the loss of social supports, while Anomic suicides arise from significant life disruption, such as job loss. Current research supports these findings, and also identifies the role of biology (Sisask et al. 2008), as well as recognising the rise of work-related causes (Germain 2014; Routley & Ozanne-Smith 2012; Takeuchi 2010).

Work-related suicide has also been viewed as a form of industrial protest in the case of Foxconn in China, where systemic level abuse of workers have been identified as contributing to 13 employee self-inflicted deaths (Chan & Pun 2010). Similarly, France Telecom received considerable negative publicity following the suicides of 25 employees within two years, and claims by the company's trade unions that stressful working conditions were to blame (Kivimaki et al. 2010). Work-related suicide is also observed to be a legal/regulatory issue (Germain 2014), yet suicides in Australia are systemically undercounted and unreported (De Leo et al. 2010). Safe Work Australia, the independent Government statutory agency, 'specifically excludes employees who died by self-inflicted injuries (suicide) (p. iii)' in their traumatic injury fatalities reporting.

Furthermore, an unknown number of accidents causing death, such as single-vehicle road crashes, might contribute to undercounting of suicides due to ambiguous information (De Leo et al. 2010). Individuals who attempt suicide in this manner often believe this will reduce the financial impact on their families through life insurance payouts (Murray & De Leo 2007). The undercounting of suicides is increasingly being recognised, and the National Committee for Standardised Reporting of Suicide (NCSRS) commenced in 2009 with the aims of accomplishing Australia wide improvements, including Bureau of Statistics data, and through police and coronial departments (De Leo et al. 2010). The implications of undercounted suicide cases in general are whether Australian reporting around work-related suicides is at present sufficient and, if not, what details are being omitted.

4

In Australia, approximately 2,300 persons die by suicide per annum, with an average of 10.7 deaths per 100,000 for 2006-2010; of this figure, W.A. was the only state to report an increase in suicide rates (ABS 2012). One national body, Lifeline, speculated that this increase 'could be due to the rise in young men moving to the state to take part in the mining boom' (Trenwith 2012). While media reports have asserted work-related suicides are higher in FIFO employees' than the general population, including one figure of 79 per 100,000 based on data collected by OzHelp on the construction and building industry super fund (Turner 2011), to date no empirical research has been conducted.

A sudden and unexpected self-inflicted death has far-reaching effects including on the deceased's family, friends, co-workers, and employer; as such, it presents various challenges to management (Kinder & Cooper 2009). Suicide is influenced by psychosocial, psychiatric, biological, family and personality influences (Blumenthal & Kupfer 1990), and is exacerbated or reduced depending on protective and triggering factors, such as a redundancy (Blumenthal & Kupfer 1988). Subsequently, there are many unique contributors and vulnerabilities which result in someone taking their own life.

Work-related suicide involves the interaction of stressful work, living conditions, and individual vulnerabilities (WHO 2006), and rates have increased significantly over the last decade (Germain 2014; Takeuchi 2010). Despite this, few research studies have explicitly explored the issue, and those that have use different inclusion criteria. This paper follows Routley and Ozanne-Smith's (2012) definition of work-related suicide that it must be 'related to work through a work agent, work stressor, commercial vehicle (train and truck) or work location as identified from police reports or coroner's findings' (p. 131). This definition was selected for this paper, first to allow subsequent research comparisons, and second, because the inclusion of factors identified by the police and coroner increases confidence that the death was significantly related to the work context.

Work-related suicide in Victoria was examined by Routley and Ozanne-Smith (2011) through analysis of coronial databases. Using 2000-2007 reports, the authors found 17 per cent of suicides were work-related. Of those, 55 per cent were connected with a work stressor, comprising of recent or previous work injury, business difficulties, unemployment/redundancy, and conflict with supervisors or colleagues including workplace bullying. Specifically, long work hours, performance pressures,

fear of, and actual, retrenchment, and augment/dissagreement with colleagues were identified as precipitating factors (Suicide Prevention Australia 2014). Males accounted for 88 per cent of suicide rates , which supports the premise that men are seven times more likely to die by work-related suicide than women (Conroy 1989). The results of Routley and Ozanne-Smith's study are useful to understand the prevalence rate and factors underpinning work-related suicide, although care should be taken in generalising the findings. Additionally, it indicates that intervention efforts should target men in particular, as they are at an elevated risk.

FLY-IN/FLY-OUT EMPLOYMENT – OCCUPATIONAL RISK AND 'VICTIM PROFILE'

The economic and labour force contributions of mining to Australia is well established. The industry provided 10.3 per cent of the GDP in 2013 (Austrade 2014), and employs approximately 325,300 persons (Australian Bureau of Statistics 2013), 100,000 of whom are on FIFO employment arrangements (Henry et al. 2013). This enables the labour force to access remote mining locations on rostered schedules, typically for extended working hours and undertaking shift work (Henry et al. 2013; Peetz et al. 2011).

It is possible that FIFO employees work in roles that are high risk for suicide, regardless of which industry they would be employed in. The majority of FIFO workers are employed as machinery operators and drivers (32.9%), technicians and trades workers (27.7%) or professional roles (14.4%); the vast majority of these employees work full-time hours, with 54 per cent working over 60 hours per week (Department of Employment 2014). Worker suicides vary across industries; occupations at high risk include labourers, cleaners, machine operators (Germain 2013; Milner et al. 2013) farmers, service workers, skilled trades such as builders and electricians (ILO 2014). Prevalant at-risk occupations reported in Victoria were managers, followed by technicians and trade workers, then professionals (e.g. engineers) (Routley & Ozanne-Smith 2012). Therefore, FIFO employees in machine operator, technical, trade, cleaning and management roles are in areas identified to be particularly susceptible to suicide.

The nature of FIFO employment has a number of inherent demands. The Healthy Work framework, developed to reduce and manage workplace stress, divides work into risk categories. Work which is 'emotionally challenging, draining, repugnant, requires prolonged concentration or has high

consequences of error' (see Bentley et al. 2009, p. 37) forms the highest risk category. This is consistent with the reported demands of a number of FIFO employment positions, particularly labouring and trade roles. Isolation, loneliness and sleep problems have been identified as integral demands of the FIFO employment arrangement regardless of the employment position or education level (Barclay et al. 2013; Vojnovic et al. forthcoming). Low well-being, stress and psychological distress has been linked to the demands of FIFO work and reported at higher levels than the general population by emerging research (Henry et al. 2013; Kelly et al. 2012; Peetz et al. 2012), although this effect appears to be absent for professional workers (Barclay et al. 2013). Interestingly, some studies have found levels of well-being equivalent to the general population (Sibbel 2010).

Occupational stress has been identified as a significant predictor of work-related suicide (WHO 2006). Levels of FIFO employee stress have been recognised to rise in the leave-to-work transition period (Clifford 2009; Diamond et al. 2008), and intensified with poor social support (Behr 2012) and compressed rosters (Henry et al. 2013; Peetz et al. 2012). Work in an intensive and pressured environment contributes to mental health problems, including sleep disorders, stress, depression and anxiety (Reichenberg and MacCabe 2007), which are risk factors to developing suicidal intent and behaviours (WHO 2012). Subsequently, FIFO employment exposes workers to risk factors of reduced social support, occupational stress, and challenges to well-being which may increase the vulnerability of those with predisposing factors.

Using data collected from the Census, broad characteristics of FIFO employees were reported (Department of Employment 2014) and it was concluded that FIFO employees' are predominantly 25-44 years of age and 88 per cent are male. FIFO workers are likely to hold a non-school (typically a trade) qualification, and are less likely to hold a university qualification than the general population. The majority are in personal relationships and have children, and have worked in the industry for over three years. These identified characteristics are consistent with empirical research (Henry et al. 2013; Kelly et al. 2012; Pryce et al. 2013) and forms a representative profile of FIFO employees. Germain (2014) identified characteristics of those who died through work related suicide, termed a 'victim profile', and found that Caucasian males aged 35-54, employed in the private sector for wage or salary, in either management positions or at a low-skill level are at the highest risk. This supports a

meta-analysis which discovered employees' with lower skill levels are at higher risk of suicide than those who are higher skilled, along with Caucasian managers (Milner et al. 2013).

The profiles of the majority of FIFO employees' are consistent with worker suicide 'victim profiles'. The work-force is 88 per cent male, and the risk to men of death by work-related suicide is also 88 per cent. The age of the majority of FIFO workers (25-44) overlaps significantly with the age (35-54) of those most vulnerable to work-related suicide. Consequently, the majority of FIFO employees' fit within pre-existing risk factors through their gender, age and occupation, which importantly, for present purposes, may give a false impression that FIFO employees' are at higher risk of work-related suicide.

CONCERNS AND STRATEGIES FOR MANAGEMENT

Human Resource Management (HRM) would benefit from understanding work-related suicide to increase its capacity to provide intervention, inform work practice and policy development, and reduce risk to both the employee and organisation. To achieve this, the domains of the working environment, working conditions, and workers' health should be considered (Takeuchi 2010). Work-related suicides and suicide attempts can be reduced in frequency through specific organisational measures. These can include: risk assessment analysis, regular inspections by professionals, and mandatory health check-ups which assess sleep problems and symptoms of depression (Takeuchi 2010), the de-stigmatisation of mental health problems and help-seeking, recognition and early detection of mental health and emotional difficulties, organisational change aimed at preventing and reducing job stress, appropriate intervention and treatment through employee health and assistance programs linked to external community mental health resources (WHO 2006, p. 2).

Depression and stress in the workplace has received considerable attention in organisations compared to work-related suicide, perhaps partly due to the inherent associated stigma (Germain 2014). Mental health issues, including depression, anxiety, stress and sleep problems, are recognised as a major risk factor for suicide, and contributed to half of the number of Australian suicides with an associated cause of death for 2001-2010 (ABS 2012). Therefore, the relationship between well-being at work and work-related suicide must receive more consideration to assist effective management of these issues. Poor well-being and suicides are increasingly being recognised for the negative impact on

worker productivity, including absenteeism, intention to quit and low performance (Dollard & Bakker 2010; Germain 2014). The impacts after a suicide have reverberating effects throughout the workplace through liability issues, effects on the companies reputation which can take years to repair (e.g. Foxconn in China, France Telecom), and bereaved colleagues and management (Kinder & Cooper 2009). Germain (2014) suggested that some managers may experience guilt for not recognising their employee was suicidal, and feel responsible for contributing to their initial job stress. Further, co-workers may also self-blame for failing to prevent the death, feel angry, betrayed and rejected, and that following an incident, may also be distracted, dysphoric and unproductive (Germain 2014).

While the human cost is incalculable, suicide and suicidal behaviour in Australia is estimated to cost $17.5 billion per year, and there is an identified need for economic modelling to estimate cost components which could provide input for a cost-effectiveness analysis of particular interventions (see Mendoza & Rosenberg 2010). While there is no reported financial rate in the literature for a FIFO work-related suicide (direct or indirect), the cost of family payout, re-hiring and training a replacement employee, reduced productivity in co-workers, life insurance payouts by the insurance industry, medical costs, the financial value of mine closure for a day (or longer) if the suicide occurs at work, and possible liabilities, it is apparent that the organisational and industrial costs are significant. Practically, reduction of work-related suicide among FIFO employees may be applied through rostering, Employee Assistance Programs (EAP), induction, and peer support programs.

Compressed roster schedules, especially more than three weeks at work, were identified as contributing to FIFO employee psychological distress (Henry et al. 2013). This was exacerbated when employees perceived they had little control over their work hours and was linked with vulnerability to physical illness (Peetz 2012). Organisationally, adjusting rosters to accommodate workers' needs may assist the management of occupational stress (Clifford 2009), identified as a risk factor for work-related suicide (WHO 2012). However, it is recognised that this may need to be balanced with associated company costs. EAPs are widely available but under-utilised in the mining industry, possibly due to low awareness of services, stigma towards help-seeking, and fear of job loss (Henry et al. 2013). Further barriers to support include a preference to talk to friends/family, confidence in one's

own coping and health, dislike or scepticism about counselling services, time constraints and a belief that it would be 'unmanly' (Henry et al. 2013, p. 87). Men are often reluctant to use support services due to concerns of masculinity, self-reliance, stigma and stoicism (Pini et al. 2012). Therefore, while supports can be provided by management, they should be designed to suit men's help-seeking styles to avoid wasted costs on otherwise under-utilised services.

Effective induction prior to the commencement of employment may foster realistic employee expectations of FIFO employment. Information and education on mental health issues and suicidal behaviour may reduce the stigma of mental health issues and promote accessing support. As the earlier statistics indicate, the FIFO workplace culture is heavily male-dominated (Pini et al. 2012), and has been described as competitive (Carter & Kaczmarek 2009). Research emphasises the importance of interpersonal relationships and employee adjustment to the FIFO working arrangement (Behr 2012; Henry et al. 2013), as well as the impact on employee turnover costs (Beach et al. 2003). To capitalise on this, peer support and promotion of positive relationships with co-workers may reduce isolation and loneliness, as well as arguments/disagreements with co-workers, which are identified as risk factors of work-related suicide (WHO 2012). This has been successfully implemented in the Queensland construction industry in an effort to reduce high suicide rates (Suicide Prevention Australia 2014), and is an approach which uses the existing work force to empower and promote personal and inter-personal responsibility of well-being. While this is not an exhaustive list of management strategies, these approaches were identified in the literature as accessible to organisations, and a cost-effectiveness analysis may prove useful in company decision making around which particular strategies to implement.

CONCLUSION

This developmental paper has provided a review to explore the salience of research into FIFO work-related suicide. It sought to examine two research questions: (a) to what extent are occupational risks for work-related suicide present in the FIFO employment arrangement? and (b) what is the prevalence of individual risks for work-related suicide among FIFO employees? The major contribution of this paper is the finding in response to the first question, that FIFO employment exposes workers to risk

factors of reduced social support, occupational stress, challenges to well-being and long work hours which may increase the susceptibility of suicide for employees with predisposing risk factors. Performance pressure, fear of, and actual, retrenchment, work injury, and arguments with colleagues may compound mental health issues and further increase the risk of suicide (Suicide Prevention Australia 2014). In response to the second question, examining statistics identified that FIFO employees in machine operator, technical, trade, cleaning and management roles are in occupations at higher risk of suicide, as well as males compared to females, which suggests targeted intervention should focus more towards these employees. Nonetheless, a relationship between the FIFO employee profile and work-related suicide 'victim profile' may lead to an overestimation of suicide rates in this population. This indicates that research into FIFO work-related suicide should interpret available data with caution. Concerns and specific management strategies to reduce work-related suicide rates of FIFO employees, including rostering, EAP, induction, and peer support programs were outlined.

There has been little emprical research on FIFO mental health, or FIFO work-related suicide. Considering the consequences for worker productivity, WHS, compensation claims, liability, damage to organisational reputation, as well as the human cost, the topic is highly relevant for further research and would make a valuable contribution to mining company HRM and policy makers. The inconsistency between definitions, incomplete contributing factors (Kraus 2005; Routley & Ozanne-Smith 2011), and the possible perception by companies of a damaged reputation (Kinder & Cooper 2009) create on-going research challenges. Safe Work Australia represents employer/employee interests (2012), yet excludes work-related suicide as a traumatic injury fatality. This may negatively affect intervention strategies which are reliant on accurate data. Under-counted industrial accident deaths has significant WHS and financial implications, and would benefit from further research.

Here it is proposed that future research explores the relationship between work injury and work-related suicide, and EAP effectiveness, stigma and help-seeking. Developing a model which extends a well validated suicide framework (see Blumenthal & Kupfer 1988), and applies it to the FIFO context by focusing on well-being, adjustment, occupational risks, help-seeking and stigma would be useful to advance this line of research. While suicide cannot be completely eliminated, it is argued that rates can be reduced and thus research into how companies can better protect its employees from

11

self-harm remains valuable. After all, the concept of the 'miner's canary' is only effective when

organisations heed the early warning.

REFERENCES

Austrade (2014) *Why Australia: Benchmark report 2014* Canberra, Australia: Australian Trade Commission.

Australian Bureau of Statistics (2012, November) *Suicides, Australia* (cat 33090). Retrieved from http://wwwabsgovau/

Australian Bureau of Statistics (2013, August) *Labour Force, Australia* (cat 62910). Retrieved from http://wwwabsgovau/

Beach, R, Brereton, D, and Cliff, D (2003) *Workforce turnover in FIFO mining operations in Australia: An exploratory study,* Brisbane, Australia: University of Queensland.

Barclay, M, Harris, J, Everingham, J, Kirsch, P, Arend, S, Shi, S, and Kim, J (2013) *Factors linked to the well-being of fly-in fly-out (FIFO) workers* Brisbane, Australia: University of Queensland.

Behr, A (2012) *An examination of the relationship between cultural adjustment, work locus of control and organisational commitment in fly-in fly-out workers in Australia* Honour Thesis, Perth: Murdoch University. Retrieved from http://researchrepositorymurdocheduau/11677/

Bentley, T, Catley, B, Cooper-Thomas, H, Garder, D, O'Driscoll, M, and Trenberth, L (2009) *Understanding stress and bullying in New Zealand workplaces*: *Final report to OHS Steering Committee.* Retrieved from http://wwwpsaorgnz/Libraries/PSA_Document_2/Bentley-et-al-reportsflbashx

Blumenthal, SJ, and Kupfer, DJ (1988) Clinical assessment and treatment of youth suicide, *Journal of Youth and Adolescence,* 17: 1-24.

Blumenthal, SJ, and Kupfer, DJ (Eds) (1990) *Suicide over the life cycle: Risk factors, assessment, and treatment of suicidal patients,* Washington, DC: American Psychiatric Press.

Carter, T, and Kaczmarek, E (2009) An exploration of generation y's experiences of offshore fly-in/fly-out employment, *Australian Community Psychologist,* 21: 52-66.

Chan, J, and Pun, N (2010) Suicide as protest for the new generation of Chinese migrant workers: Foxconn, global capital, and the state, *The Asia-Pacific Journal*, 37(2): 1-50.

Conroy, C (1989) Suicide in the workplace: Incidence, victim characteristics, and external cause of death, *Journal of Occupational and Environmental Medicine,* 31(10): 847-851.

De Leo, D, Dudley, MJ, Aebersold, CJ, Mendoza, JA, Barnes, MA, Harrison, JE, and Ranson, DL (2010) Achieving standardised reporting of suicide in Australia: rationale and program for change, *Med J Aust*, 192(8): 452-456.

Department of Employment (2014) *Characteristics of FIFO workers.* Retrieved from http://lmipgovau/PortalFileaxd?FieldID=1394570

Department of Foreign Affairs and Trade (2013, December) *Composition of trade Australia 2012-2013.* Retrieved from http://wwwdfatgovau/publications/stats-pubs/cot-fy-2012-13pdf

Dollard, M, and Bakker, A (2010) Psychosocial safety climate as a precursor to conducive work environments, psychological health problems, and employee engagement, *Journal of Occupational and Organizational Psychology,* 83: 579-599.

Durkheim, E (1897/1951) *Suicide: A study in sociology* (J A Spaulding, and G Simpson, Trans) Glencoe, IL: The Free Press.

Germain, ML (2014) Work-related suicide: An analysis of US government reports and recommendations for human resources, *Employee Relations*, 36(2): 148-164.

Henry, P, Hamilton, K, Watson, S, and Macdonald, N (2013) *FIFO/DIDO Mental Health.* Retrieved from http://wwwlifelinewaorgau/download/FIFO%20DIDO%20Mental%20Health%20Research%20Report%202013pdf

International Labour Organization (2008) *ISCO-08 structure (Excel) ILO, 2008.* Retrieved from wwwiloorg/public/english/bureau/stat/isco/docs/struct08xls

Kelly, B, Hazell, T, and Considine, R (2012) *Mental health and the NSW minerals industry.* Retrieved from http://himhclientssquiznet/__data/assets/pdf_file/0004/4945/Mental-Health-in-Miningpdf

Kinder, A, and Cooper, CL (2009) The costs of suicide and sudden death within an organization, *Death Studies*, 33(5): 411-419.

Kraus, J, Schaffer, K, Chu, L, and Rice, T (2005) Suicides at work: Misclassification and prevention implications, *International Journal of Occupational and Environmental Health,* 11(3): 246-253.

13

Mendoza, J, and Rosenberg, S (2010) *Suicide and suicide prevention in Australia: Breaking the silence,* Moffat Beach, Australia: ConNetica Consulting.

Milner, A, Spittal, MJ, Pirkis, J, and LaMontagne, A D (2013) Suicide by occupation: systematic review and meta-analysis, *The British Journal of Psychiatry*, 203(6): 409-416.

Murray, D, and De Leo, D (2007) Suicidal behavior by motor vehicle collision, *Traffic injury prevention*, 8(3): 244-247.

Peetz, D, and Murray, G (2011) You get really old, really quick: Involuntary long hours in the mining industry, *Journal of Industrial Relations,* 53: 13-19.

Peetz, D, Murray, D, and Muurlink, O (2012) *The impact on working arrangements on the physical and psychological health of workers and their partners,* Brisbane, Australia: Griffith University.

Pini, B, and Mayes, R (2012) Gender, emotions and fly-in fly-out work, *Australian Journal of Social Issues,* 47: 71-86.

Pini, B, McDonald, P, and Mayes, R (2012) Class contestations and Australia's resources boom: The emergence of the cashed-up bogan, *Sociology,* 46: 142-158.

Pryce, J, Welters, R, Lynch, P, Murphy, L, and Blackman, A (2013) *Identifying and profiling potential FIFO workers,* Cairns, Australia: James Cook University.

Reichenberg, A, and MacCabe, J (2007) Feeling the pressure: Work stress and mental health *Psychological Medicine*, 37: 1073-1074.

Sibbel, AM (2010) Living FIFO: The experiences and psychosocial wellbeing of Western Australian fly-in/fly-out employees and partners, Unpublished PhD thesis, Perth: Edith Cowan University. Retrieved from http://roecueduau/theses/132

Sisask, M, Varnik, A, Kolves, K, Konstabel, K, and Wasserman, D (2008) Subjective psychological well-being (WHO-5) in assessment of the severity of suicide attempt, *Nordic Journal of Psychaitry,* 62(6): 431-435.

Suicide Prevention Australia (2014) *Work and suicide prevention: Position statement* Sydney, Australia: Suicide Prevention Australia.

Takeuchi, T (2010) Matrix analysis and risk management to avert depression and suicide among workers *Biopsychosocial Medicine*, 4: 15.

Trenwith, C (2012, July 25) WA only state to record increase in suicide rate *WA Today.* Retrieved from http://wwwwatodaycomau/wa-news/wa-only-state-to-record-increase-in-suicide-rate-20120724-22njqhtml

Turner, R (2011, March 12) Depression the dark side of mining *The Australian.* Retrieved from http://wwwtheaustraliancomau/national-affairs/policy/depression-the-dark-side-of-mining-boom/story-fn59nokw-1226019669569

Vojnovic, P, Michelson, G, Jackson, D, and Bahn, S (Forthcoming) Adjustment, well-being and help-seeking among Australian FIFO mining employees, *Australian Bulletin of Labour.*

Work Safe Australia (2012) *Work-related traumatic injury fatalities.* Retrieved from http://wwwsafeworkaustraliagovau/sites/swa/about/publications/pages/work-related-traumatic-injury-fatalities-australia-2012-

World Health Organisation, (2006) *Preventing suicide: A resource at work* Geneva, Switzerland: WHO Press.

World Health Organisation (2012) *Public health action for the prevention of suicide* Geneva, Switzerland: WHO Press.